

THE OUTLOOK AND INVESTMENT CASE FOR PLATINUM

Weibin Deng, Regional Head, Asia Pacific
World Platinum Investment Council

5th June 2023



WPIC - Growing platinum investment

WPIC Members



OUR GROWING NUMBER OF
PRODUCT PARTNERSHIPS COVERS
MAJOR INVESTMENT MARKETS



WPIC – What we do

Actionable insights

- Data and analysis
- Research and insights
- Investor engagement / development



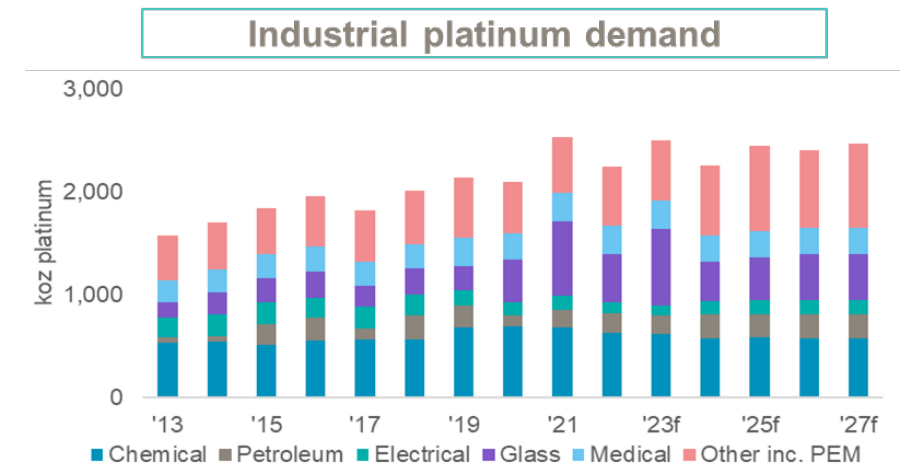
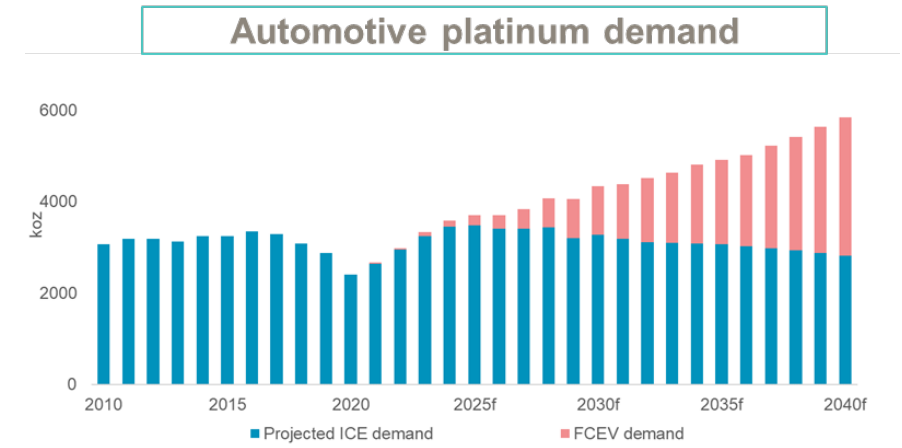
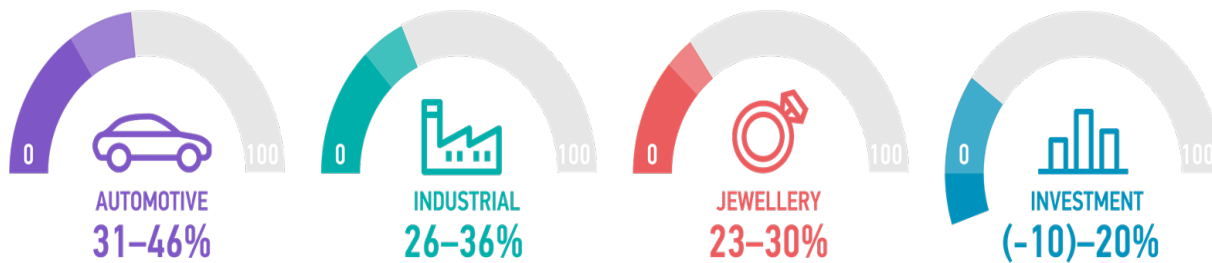
Market development

- Understand investor needs/product gaps
- Partner with product providers
- Increase products and availability

Investor type	Investment products
Public / private	Coins and bars
Retail	Accumulation plans
Wealth / high net worth	Physically backed ETPs
Hedge / specialist fund	Vaulted physical
Institutional	
Central bank	

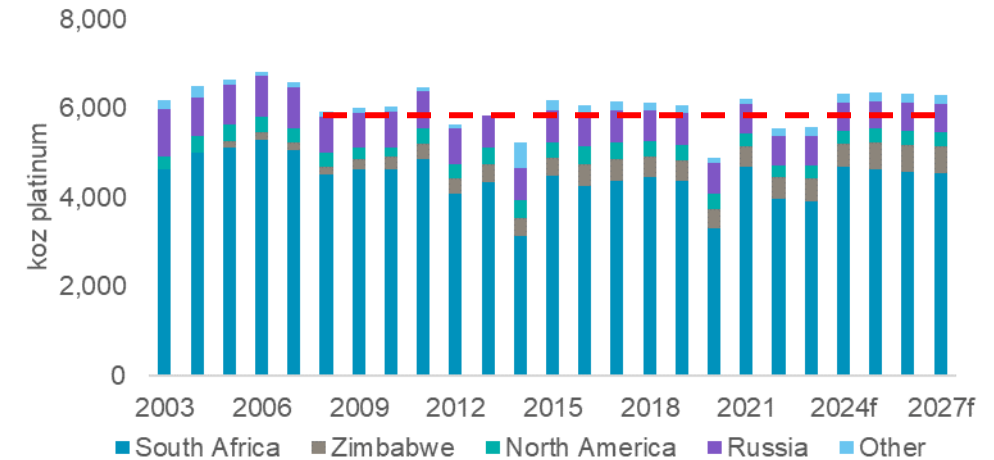
Key platinum demand drivers

- Platinum has a large end-use base.
- End-use diversity offsets any volatility within individual markets leading to consistent cumulative demand growth
- Industrial platinum demand has grown at 4.7% CAGR since 2013, that is 50% faster than global GDP over the same period.
- Automotive demand continues to grow despite ICE phase out.
 - ICE Pt additions due to increased emissions testing & regulations.
 - Heavy-duty FCEV additions as economics outperform BEV.
- Total demand increase of +28% YoY, 2023f (>1.7Moz)
- Strong demand outlook - China & Japan +14% gain in global share of demand forecast for 2023 (43%).
 - Major drivers: Bar & Coin and EFT inflows followed by glass and automotive.

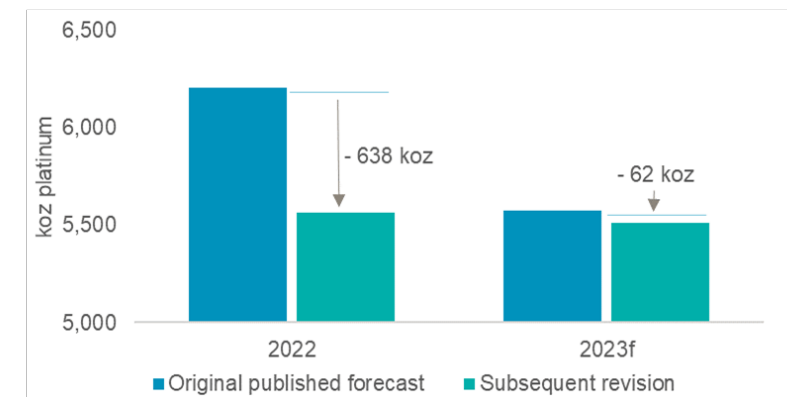


The outlook for platinum supply

- Supply peaked in 2006.
- Miners low profitability in 2010's constrained capital budgets and reinvestment.
- 83% of mined supply originates from South Africa & Russia.
- Ongoing geopolitical and socio-economic instability have added to low rates of reinvestment, stagnating mine expansions and leading to a flat supply outlook.
- **Total supply down 13% from 2021.**
 - Increased geopolitical instability.
 - Ongoing South African smelter maintenance.
 - Increased South African intensity & duration of load shedding.
 - Potential disruption to Russian operations following sanctions.
- **Downside risk to outlook as mined supply revisions persist.**
- **Meaningful deficit opening up to ~1.0Moz.**

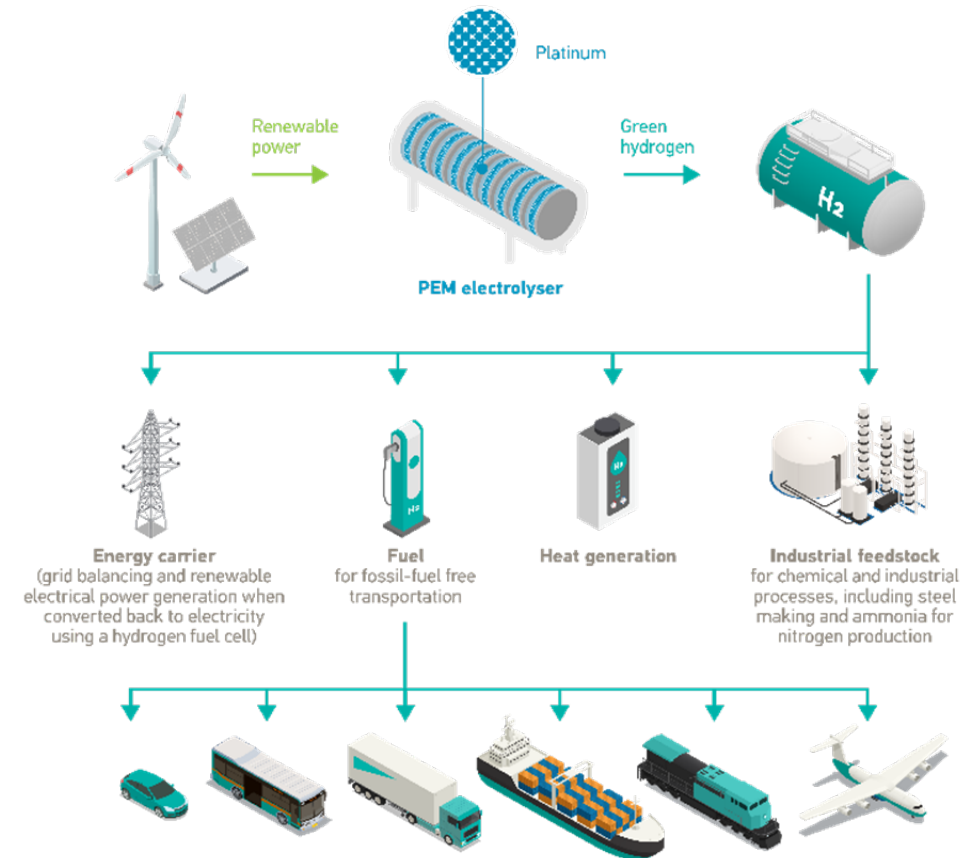


Downward revisions to mined supply persist



Green hydrogen, a new end source of demand

- H2 is used to displace natural gas in hard to electrify end uses and as a fuel in fuel cells and fuel cell electric vehicles.
- Platinum is used in PEM electrolyzers for the production of Green H2, and in fuel cells to generate electricity from H2.
- Platinum facilitated green hydrogen could provide over 10% of the CO2 savings in the Paris Accord 2°C warming scenario and reach more than 30% of total platinum demand by 2040.
- Hydrogen linked public funding and subsidy commitments of >US\$790B (e.g. IRA).
- Platinum is a proxy for investing in hydrogen where there are limited publicly listed investment opportunities.



A highly attractive supply-demand outlook

- **Forward looking platinum fundamentals are the strongest for years:**
 - Sustained market tightness.
 - Worsening supply outlook.
 - Automotive production below recessionary demand.
 - Increasing platinum for palladium substitution.
- **Outlook for sustained significant Pt deficit.**
- **Growing investor interest in platinum as a proxy investment for green hydrogen.**

